

Title (en)

METHODS, CIRCUITS, AND APPARATUS FOR MOTION DETECTION, DOPPLER SHIFT DETECTION, AND POSITIONING BY SELF-ENVELOPE MODULATION

Title (de)

VERFAHREN, SCHALTUNGEN UND GERÄTE ZUR BEWEGUNGSDETEKTION, DOPPLER-VERSCHIEBUNGSDETEKTION UND POSITIONIERUNG DURCH MODULATION DER SELBSTHÜLLKURVE

Title (fr)

PROCÉDÉS, CIRCUITS ET APPAREIL POUR LA DÉTECTION DE MOUVEMENT, LA DÉTECTION DE DÉCALAGE DOPPLER ET LE POSITIONNEMENT PAR MODULATION À AUTO-ENVELOPPE

Publication

EP 3719534 A1 20201007 (EN)

Application

EP 20167553 A 20200401

Priority

- US 201962827635 P 20190401
- US 201962886293 P 20190813
- US 202016826584 A 20200323

Abstract (en)

Methods and apparatus for detecting motion of an object in an environment, the method including transmitting a first wireless signal related to a transmission signal and receiving a second wireless signal related to an incoming signal, wherein the second wireless signal is a reflected first wireless signal from the object, obtaining a modulation signal related to a combination of the transmission and incoming signals, wherein the modulation signal contains a Doppler shift caused by the motion of the object, extracting a signal envelope varied by the Doppler shift from the modulation signal, and determining whether motion of the object is detected in accordance with the signal envelope.

IPC 8 full level

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CPC (source: CN EP KR US)

G01S 7/03 (2013.01 - EP); **G01S 7/2925** (2013.01 - US); **G01S 7/415** (2013.01 - KR US); **G01S 13/04** (2013.01 - EP); **G01S 13/50** (2013.01 - CN); **G01S 13/505** (2013.01 - KR); **G01S 13/522** (2013.01 - US); **G01S 13/524** (2013.01 - EP); **G01S 13/536** (2013.01 - EP); **G01S 13/56** (2013.01 - EP US); **G01S 13/886** (2013.01 - EP); **G05F 1/66** (2013.01 - CN); **G06F 3/017** (2013.01 - EP); **G08B 13/2491** (2013.01 - EP)

Citation (applicant)

- US 201962827635 P 20190401
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Citation (search report)

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Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)

BA ME

DOCDB simple family (publication)

EP 3719534 A1 20201007; CN 111796264 A 20201020; CN 111796264 B 20240524; CN 118425949 A 20240802; EP 4411517 A2 20240807; JP 2020169989 A 20201015; JP 2023086731 A 20230622; KR 102342618 B1 20211222; KR 20200116863 A 20201013; TW 202037923 A 20201016; TW I765244 B 20220521; US 2020341133 A1 20201029

DOCDB simple family (application)

EP 20167553 A 20200401; CN 202010248709 A 20200401; CN 202410532880 A 20200401; EP 24183427 A 20200401; JP 2020062288 A 20200331; JP 2023050928 A 20230328; KR 20200039352 A 20200331; TW 109111123 A 20200401; US 202016826584 A 20200323